



North Carolina Department of Transportation
Transportation Program Management Unit - Value Management
Innovative Technologies and Products Awareness Report
August 2, 2017

TECHNOLOGY INNOVATION – Non-Motorized Volume Data Program

There is currently no extensive practice for counting bicycle and pedestrian traffic in any DOT across the USA. The NCDOT Bicycle and Pedestrian Division partnered with Research and Development Office and Institute for Transportation Research and Education (ITRE) to come up with a Non-Motorized Volume Data Program (NMVDP). They opted to use Eco-Counter products - a company that provides a range of automated pedestrian and cycling counting systems. For more information: <http://www.eco-compteur.com/en>.

These sensors count pedestrians and cyclists and include the direction of travel for their data collection. They are installed above and below ground as needed for accurate counting at the selected location. The data collection system was piloted in Divisions 7 and 9 in the Triad region. Two years of complete data has been collected.



Figure 7. Example site diagram; aerial image shows location of equipment and sensors, labeled facilities, and is oriented north.

The data collected can be used when determining funding and needs for bicycle and pedestrian transportation projects. The data assists in project planning, aids in project monitoring and performance measurement, provides analytical processes and supports trend analysis.

Presently, the Department can only rely on qualitative, subjective, and limited crash data to further the bicycle and pedestrian transportation programs. By having accurate data on all modes of transportation, the Department can better make decisions for current and upcoming transportation needs by reviewing comprehensive counting data.

A full copy of the report can be found: <https://itre.ncsu.edu/wp-content/uploads/2016/05/Phase-I-Report.pdf>.

TECHNOLOGY HIGHLIGHT – NC BikeWays

NC BikeWays provides an interactive website to allow you to explore bike routes across North Carolina. There are nine (9) routes that can be followed of varying difficulties. Through NC Bike Ways you can gather information on elevation, distance, difficulty, and a description of the route. The website also allows you to download turn-by-turn directions from various locations along the selected route.

The next phase of the NC Bike Ways website is to have interactive, voice directed turn-by-turn directions provided through GPS. This will allow the user to effortlessly and safely follow their selected trip. Plan your trip at <https://www.ncdot.gov/bikeped/ncbikeways/>.

